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ABSTRACT

In the study of the effectiveness of traditional methods of evaluation (high school GPA and SAT scores) and subjective methods of evaluation (self, peer, parent, counselor, and teacher perceptions) in predicting the academic performance of 47 disadvantaged college freshmen, traditional methods proved inadequate. Among the subjective methods, peer prediction was found to be significantly related to the disadvantaged student's academic performance. Counselors achieved the dubious distinction of having the poorest "track record" in estimating the academic performance of the students. Study results suggest that the more hours disadvantaged students attempt, the higher their achieved GPA. This finding tends to refute the assumption that disadvantaged students perform better academically when they carry reduced class loads. (Author)

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PREDICTING THE ACADEMIC ACHIEVEMENT OF DISADVANTAGED COLLEGE BOUND STUDENTS

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Predicting the Academic Achievement of Disadvantaged College Bound Students

Recognizing the necessity and mandate for identifying untapped talent and developing latent human potential, institutions of higher education have increased their accessibility to persons of disadvantaged backgrounds through the implementation of special programs. However, the process relative to the selection, admission, and prediction of academic achievement for disadvantaged students remain largely traditional in scope in spite of the large volume of research which shows that traditional objective methods of assessment often penalize the foregoing students.

Kendrick (1964-65) suspected that children who were culturally and socially disadvantaged were probably underestimated frequently. He stressed that it was extremely important that an unusually thorough investigation be made to determine whether or not the total environment of the candidate over the years justified a suspicion that the test did not fit the student. Similarly, Duggan (1965) believed that the possibility of bias in the test scores for underprivileged youngsters was unusually high.

To ascertain the status of its admissions testing program, the College Entrance Examination Board (1970) appointed a Commission on Tests to evaluate the program. The report recognized the allegations that the Board's test - its SAT and the achievement tests -- reflected a bias against disadvantaged groups that resulted in their relatively depressed scholastic attainment.

From the perusal of literature, high school grade-point-average when used as a single predictor of academic achievement for the disadvantaged student seemed more suppressed than when it was used with traditional students. On the other hand, the validity of the predictive quality of the HS GPA was increased when combined with standardized test scores.

Investigations dealing with subjective prediction of academic success for the disadvantaged are scarce. Clark (1960), and Gordon (1969), concluded that the work habits and the way in which each youngster viewed himself as a learner may have been more important to the learning rate and achievement than other characteristics which may have handicapped him in a formal learning situation. Witty (1967) believed that the disadvantaged were characterized by a denigration of one's potential as a person and as a learner and by a spirit of resignation.

Unfortunately no studies were found dealing specifically with teacher prediction of academic achievement for their former students. Further, studies involving parental prediction of their children's academic achievement in college produced nil results.

Burke (1969), using the data from two experiments of self-evaluation and peer ratings, found that peer ratings yielded a more typical grade distribution and a high degree of internal consistency. In the area of counselor prediction, Tyler (1961) concluded that counselor prognoses of success for clients were not sufficiently accurate to safely base decisions on them.

PROBLEM

In this pilot study, the investigator was concerned with the relationship that existed between specified objective measurements, subjective predictions, and the academic achievement of selected disadvantaged college freshmen. The study sought to answer the following questions:

1. How well did such traditional objective methods of evaluation as the SAT and HS GPA relate to the academic achievement of the disadvantaged college bound student?
2. How well did such subjective methods of evaluation as self perception of ability, and peer, teacher, counselor, and parental perceptions of student's ability relate to the academic achievement of the disadvantaged college bound student?
3. What kind of criteria should be considered in assessing the suitability of disadvantaged students for admission to college?

The criterion variable of academic achievement was the student's freshman year grade-point-average.

METHOD

The population for this study was comprised of the forty-seven (47) disadvantaged high school graduates who enrolled at a large middle western university in the Fall of 1970. The students were from families which had incomes below the U.S. Bureau of Census established poverty levels. They did not meet the university's

admission requirements which were minimum scores of 400 on both SAT verbal and mathematics and a 2.0 high school GPA.

The population was composed of 16 males and 31 females with ages ranging from 17 to 21 years old. There were 33 Blacks, 10 Mexican-Americans, and 4 white subjects in the population. Other background data were obtained by the means of a questionnaire.

A Self-Perceived Academic Ability Inventory was devised by the investigator and given to each student in the population. Also, the investigator obtained from each student the names of two close friends, two favorite high school teachers, two high school counselors who knew him or her well, and parents or guardian. Two names for each category were obtained in the event the students' first choice(s) could not be reached or refused to cooperate in the study.

Predictions of the students' academic performances were obtained by mail or via telephone from the individuals indicated by the students. At the end of the freshman year, grade-point-averages were secured and Pearson product-moment correlations between the twelve predictor variables and criterion variable were calculated. On the basis of these intercorrelations it was possible to determine the more relevant predictors.

RESULTS

Of the twelve predictor variables, only three, ethnic group membership, peer prediction, and hours attempted, were significantly

related to the freshman year academic achievement of the disadvantaged students. The standardized measures of evaluation (HS GPA, SAT scores) were not predictive of freshman year success for these students.

Although the correlation between ethnic group membership and success was significant at the .10 level of confidence, the small size of the white group placed severe limitations on making inferences and assumptions. However, it would appear that white disadvantaged college students tend to do better during their freshman year than their non-white (Black and Mexican-American) counterparts.

It was found that peer prediction related significantly (.10 level of confidence) with the disadvantaged students' freshman year performance. From this data, it can be assumed that the peers of disadvantaged college bound students can predict success accurately and consistently.

A positive correlation (.01 level of confidence) was found between the number of hours attempted by the students and their academic achievement. In other words, the more hours the students attempted the higher their achieved GPA.

CONCLUSIONS

In relation to the questions posed for examination in this pilot study, the predictive powers of the traditional methods of evaluation (HS GPA and SAT scores) were found to be inadequate in predicting the academic achievement of disadvantaged college freshmen. Of the subjective methods of evaluation, peer prediction was found to be significantly related to the disadvantaged student's academic performance; while, counselors achieved the dubious

distinction of having the poorest "track record" in estimating the academic performances of the disadvantaged students.

The implications of this study are great relative to admission policies. Because of the paucity of research concerning college admission policies for the disadvantaged student, the potential contribution of this study to the literature in this field should not be minimized. It would appear that institutions of higher education in identifying and screening disadvantaged students for admission should include in their procedures an appraisal of the student's abilities and prognosis of success as supplied by peer(s) of the student. Additionally, counselor appraisal should be given little or no weight in the selection of disadvantaged students for admission to college.

From the study, it may be suggested that the more hours the students attempted the higher their achieved GPA. Typically, programs for disadvantaged students recommends that these individuals be given reduced class loads, however this finding tended to refute this practice and the underlying assumption that a student would perform better academically if he or she enrolled for lesser class hours. Of course, extensive supportive services should be available for those students who desire and/or need assistance in order to succeed in their academic undertakings.

The findings and conclusions drawn from this and similar studies concerning programs for the disadvantaged student should not cease at this point. Further research in this area is of great importance if programs of this nature are to be efficient and serve the clientele for which they are designed.

Table 1

Intercorrelations of Predictors of Success for Disadvantaged College Bound Students

Variable	Sex 1	Ethnic Grp. 2	College 3	HS GPA 4	SAT-V 5	SAT-M 6	Self Pred. 7	Peer Pred. 8	Parent Pred. 9	Teach. Pred. 10	Couns. Pred. 11	Hrs. Attemp. 12
2	.09											
3	.09	-.04										
4	.18	-.01	.00									
5	-.21	.26*	-.25*	.30**								
6	-.35***	.21	-.24	.27*	.63***							
7	.19	.02	-.20	.35***	.20	.19						
8	-.01	.15	-.10	.19	.39****	.43****	-.00					
9	.15	.22	-.24	.28*	.13	.11	.14	-.09				
10	.05	.05	-.08	.36***	.37****	.29	.03	.20	.15			
11	.19	-.02	-.22	.53***	.27*	.28**	.36***	.08	.30*	.23		
12	.00	.30**	-.10	.03	.09	.02	.02	.22	.13	.01	-.17	
Ach. GPA	.19	.25*	.24	.14	.03	-.05	-.04	.28*	.06	.14	-.19	.62****

* Significant at the .10 level of confidence
** Significant at the .05 level of confidence
*** Significant at the .02 level of confidence
**** Significant at the .01 level of confidence

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